# **Labocube Closed Cooling Circulators with Build-in Solvent Collection device**

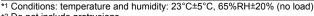
# **CF321P**

-20°C~Room temp.

- The solvent recovery device is equipped with a Teflon diaphragm type vacuum pump.
- Uses HFC refrigerant R404A that complies with the CFC regulations.
- The control panel has digital setting and display and timer function.
- It has an external interlocking function that turns off the power supply of the circulator when the operation is completed by interlocking with the external device.
  - When connected to the rotary evaporator RE601/801, the vacuum pump stop delay timer function of the rotary evaporator RE601/801 can
- The drain cock, overflow port, overcurrent leakage breaker are placed in front of the body, so you can operate in front of the body.

# Specifications

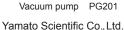
Product code	221563	
Model	CF321P	
Circulation method	External closed circulation	
Operating temperature range	-20°C to Room temperature	
Temperature control accuracy*1 Temperature fluctuation	3°C(JTM K05/JIS) at 10°C	
	Approx.440W (344Kcal/h), at fluid temp.10°C	
Cooling capacity*1	Approx.350W (300Kcal/h), at fluid temp. 0°C	
	Approx.285W (245Kcal/h), at fluid temp10°C	
Temperature control	Refrigerator ON-OFF control	
Temperature sensor	T thermocouple (with SUS protection tube)	
Temperature setting, display	Digital setting and digital display	
Refrigerator/Refrigerant	Air cooling, 350W / R404A	
Circulating pump (50/60Hz)	Magnetic drive pump, 34/35W	
Max. flow (50/60Hz)	9.1 / 8.9L/min	
Max. lift (50/60Hz)	4.8 / 5.5m	
Cooling coil	Nickel plated copper	
External circulation nozzle	O.D. 10.5mm (SUS) discharge and return, Discharge side has a stop valve	
Operating ambient temp. range	5 to 35°C	
Solvent recovery cooling tube	SUS304 $\phi$ 8mm, Surface area 530cm <sup>2</sup>	
Solvent collecting nozzle	O.D. $\phi$ 8 (SUS), 1 each suction and exhaust	
Solvent collecting bottle	500mL glass bottle (1 pc.)	
Vacuum pump connection	External interlocking function external interlocking terminal (no-voltage type): Circulation pump and vacuum pump of the circulation device stop at the contact closing.	
	RE signal connector: Vacuum pump delay stop circuit by RE601/801 interlocking. (Communication cable for vacuum pump delay timer is optional)	
Other functions	Drain, Overflow, Dust prevention filter, Calibration offset function, key lock function, Power failure compensation function	
Safety device	Overcurrent leakage breaker, Refrigerator overload relay protection circuit, Pump thermal protector, Refrigerator protection delay timer function, Circulation pump protective H bypass	
Water tank	Stainless steel rectangular tank, approx. 4L( liquid capacity of 3L) with overflow	
Power supply (50/60Hz)	AC115V / AC220V Single phase with step- down transformer	
External dimensions*2	W500×D400×H600mm	
Weight	Approx. 52kg	
Accessories	Drain hose (1 pc), Top cover (1 pc), Solvent collecting bottle (1 pc), Overflow hose (1 pc), Circulation hose (1.5m×2 pcs), Wire clamps (2 pcs), RE special Cable	



\*2 Do not include protrusions

The length of the power cord is about 2 meters outside the unit.







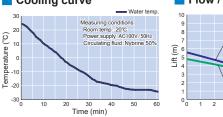
Insulated circulation hose



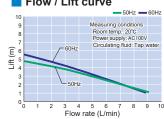
Straight circulation nozzle



# Cooling curve

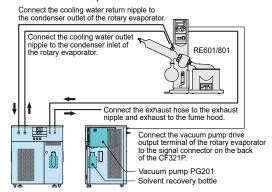


#### Flow / Lift curve



#### System configuration example

Connection example of CF321P and RE601/801



### Optional Items

No.	Description	Specifications	Product code
1	Straight circulation nozzle	$\phi$ 10.5mm, Connecting screw: Rc3/8	221394
2		$\phi$ 16mm, Connecting screw: Rc3/8	221395
3	L-shaped circulation nozzle	$\phi$ 10.5mm, Connecting screw: Rc3/8	221396
4		φ 13.0mm, Connecting screw: Rc3/8	221397
(5)		$\phi$ 16.0mm, Connecting screw: Rc3/8	221398
6	Insulated circulation hose	I.D. φ9mm×2m length (2pcs), Clamp (4pcs)	221581
7	Communication cable for vacuum pump delay timer		281522
8	Vacuum pump PG201		255158
9	Vacuum hose	$\phi$ 6mm×5m length (1pc)	255297

